

California, Mexico, and Portuguese East Africa. Our work since 1911 has not added greatly to the known distribution except for the collection of 4 lots of parasitized nymphs of *Rhipicephalus sanguineus* Latr. in South Miami, Florida, in 1931 by Mrs. S. G. Martin. These ticks were all taken on dogs. The first lot, collected September 6th, consisted of 127 well engorged nymphs, 7 of which were parasitized. The second lot consisted of 35 nymphs, a few of which were parasitized. These were collected September 14th. The third collection, October 9, consisted of 15 nymphs, 13 of which were parasitized. The fourth consisted of 45 nymphs collected October 24. Among these 15 were parasitized, 14 of which produced a total of 85 parasites.

This species was also reared from a single nymph of *Dermacentor variabilis* Say which was collected, together with several engorged nymphs of *Amblyomma americanum* L., on a cow October 15, 1931, on Capers Island, S. C., by E. K. Moore. The nymphs of *A. americanum* were not parasitized. The parasites from South Miami and Capers Island were identified by A. B. Gahan. In 1929 a number of nymphs of *Dermacentor* parasitized by the French species *Ixodiphagus caucurtei* Buysson were released on Capers Island by Dr. Joseph Bequaert of Harvard University.

H. O. Schroeder of the Bureau of Entomology has found this parasite to be more or less common in the vicinity of Brownsville, Tex., in the past two years, but has not found parasitized ticks in other parts of the State.

A NEW VARIETY OF PLEOCOMA.¹

By A. C. DAVIS, *Takoma Park, Md.*

Pleocoma conjungens Horn Variety *hirsutus*, n. var.

General appearance as in *Pleocoma conjungens*. Elytra shining black, margins with a brownish tinge, pronotum piceous, brown at sides.

Head above, including ocular canthi, closely punctate and thickly covered with long yellow-brown hair; ocular canthi with the anterior margins curving forward of a right angle with the long axis of the body, apices acute, rounded, lateral margins nearly straight, posterior angles obtuse but distinct.

Pronotum slightly less than twice as wide as long (6 by 11.8 mm.), black, brown at sides, with an occasional hair upon its surface; posterior median impression nearly lacking; lateral pits lacking; transverse ridge lacking, the basal part of the pronotum being smoothly and evenly convex to the declivity; anterior median impression distinct and moderately deep, very heavily and coarsely punctate, and rather densely clothed with long yellow-brown hair.

Scutellum sparsely, finely punctate, and sparsely clothed with short hair.

¹ Order Coleoptera; family Scarabaeidae.

Legs and body beneath brown, very densely clothed with long yellow-brown hair.

Antennae almost exactly as in the specimen of *P. conjungens* labeled as the type in the collection of the Academy of Natural Sciences of Philadelphia, except in the proportions of antennal joints 1 to 3, which are 1.2, 0.3, and 1.0 mm. in length, respectively, as compared with 0.7, 0.25, and 0.8 mm. in the type.

Type locality.—Between Lebec and Saugus, in Los Angeles County, Calif., in the Sierra Madre Mountains. Collected by R. D. Lusk.

Type.—Male in the collection of the Los Angeles Museum. This specimen was lent to me for study by L. J. Muchmore.

Among Mr. Lusk's effects the following data, attached to a letter of inquiry from Mr. Muchmore, were found by Earl Hakes: "Found on the 22d day of January, 1933, about 7 miles this side of the summit on the Ridge Route. There were hundreds of these bugs flying through the air just below the snow line about 5 P. M."

This variety, while close to *P. conjungens* in most respects, seems to differ from the typical form enough to justify at least a varietal name. It may be separated from *conjungens* by the color, different shape of the ocular canthi, the more parallel sides of the horn of the vertex, the extreme hairiness of the head and anterior part of the pronotum, the heavily punctate anterior median impression, and the slightly different proportions of the first 3 antennal joints.

ON THE IDENTITIES OF CHALCIDOID TICK PARASITES (HYMENOPTERA).

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The discovery that Rocky Mountain spotted fever, a tick-borne disease, has become established in several widely separated sections of the United States and is becoming an increasingly important problem, has stimulated a keen interest in the natural enemies of ticks.

So far as known the only important insect enemies of ticks are minute chalcidoids belonging to the family Encyrtidae. The first record of one of these parasitic insects attacking a tick was published by L. O. Howard (1) in 1907 when he described *Ixodiphagus texanus*. The following year Howard (2) described a second genus and species from Texas which he called *Hunterellus hookeri* and in 1912 *Ixodiphagus caucurtei* was named and described by R. du Buysson (5) from France. A paper by R. A.